



STATE OF WASHINGTON
WASHINGTON STATE BOARD OF HEALTH
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May 14, 2003

TO: Washington State Board of Health Members

FROM: Carl Osaki, Member

**RE: ONSITE WASTEWATER TREATMENT SYSTEMS OVERVIEW AND
RULE DEVELOPMENT COMMITTEE UPDATE**

Summary

The Department of Health (DOH) estimates that 2.4 million Washington state residents rely on approximately 800,000 onsite sewage treatment and disposal systems, and that many of the systems share home sites with private drinking water wells. Onsite wastewater treatment systems work well if they are installed in areas with appropriate soils and hydraulic capacities; designed to treat the incoming waste load to meet public health, groundwater, and surface water standards; installed properly; and maintained to ensure long-term performance (2002 *USEPA Onsite Wastewater Treatment System Manual*).

The number of failing onsite wastewater treatment systems in Washington is unknown. Estimates of onsite wastewater treatment system failure rates in Washington range widely, from 1 to 3 percent (Mark Soltman, personal communication) to 33 percent (Nelson, et al, 1999, in the 2002 *USEPA Onsite Wastewater Treatment System Manual*). Onsite wastewater system failures can result in contamination of drinking water wells, groundwater, and surface water (see attached graphic, "Onsite septic system effluent plume movement"). Public health impacts of onsite wastewater system failures include:

- Parasites, bacteria, and viruses can cause communicable diseases through direct or indirect contact or ingestion of contaminated water or shellfish (see attached memo on data pertaining to onsite sewage system impacts related to commercial shellfish area downgrades).
- Excessive nitrogen in drinking water can cause illness in infants and pregnancy complications.

The onsite sewage systems rules, Chapter 246-272 WAC, were opened for revision in January 2001. The Board expects to hear a report from the Onsite Wastewater Rule Development Committee (RDC) this fall, and hold a public hearing and make decisions regarding the rules in early 2004 (see attached onsite wastewater systems rule revision timeline). I thought it timely, as well as locally relevant, to update the Board on onsite wastewater system issues and the RDC's progress.

Recommended Board action:

None.

Background:

The Board has authority to:

adopt rules and standards for prevention, control, and abatement of health hazards and nuisances related to the disposal of wastes, solid and liquid, including but not limited to sewage, garbage, refuse, and other environmental contaminants; adopt standards and procedures governing the design, construction, and operation of sewage, garbage, refuse and other solid waste collection, treatment and disposal facilities. (RCW 43.20.050 (2)(b))

The Board adopted revised On-Site Sewage System Rules (WAC 246-272) in March 1994 after six years of extensive stakeholder work and public review. The rule revision process was lengthy because of several contentious issues. It involved the Legislature, other state agencies, local health officers, and private sector practitioners.

The rules, which took effect January 1, 1995, directed DOH to maintain an Onsite Advisory Committee (OAC) to assist in the review of program services and to make recommendations concerning department policy and regulations (WAC 246-272-24001). DOH first convened the OAC on October 12, 2000. The committee has more than 20 members representing diverse stakeholders in the field of onsite sewage treatment (see OAC member list at end of memo).

The OAC proposed 55 recommendations, with three identified as priorities:

1. Improve operations and maintenance of onsite systems by developing management methods and support systems, promoting public/private partnerships, and creating a new position to develop linkages between agencies, organizations, and practitioners.
2. Create a rule development process that is effective, timely, and responsive to the recommendations of the OAC and other stakeholders.
3. Fund initiatives to repair and replace failing onsite sewage systems, to develop local operation and maintenance management programs, and to recoup costs of program services.

In October 2001 the Board received recommendations from DOH and DOH's Onsite Advisory Committee (OAC) to revise Chapter 246-272 WAC, Onsite Sewage Systems. The Board filed a CR-101 to initiate the rule revision process on January 23, 2001.

Consistent with the OAC recommendation on the rule development process, DOH formed an Onsite Wastewater Rule Development Committee (RDC) to assist DOH in developing proposed rules. The RDC first met on February 13, 2002 and has been meeting approximately every other month. It is made up of some OAC members and additional stakeholder representatives (see attached RDC membership list).

Art Starry, Thurston County Public Health and Social Services Environmental Health Director, and Director of Washington's Environmental Health Directors, and Debbie Riley, Mason County Department of Health Services Environmental Health Manager, will present on local health and environmental impacts of onsite wastewater treatment systems, local health jurisdictions' role in onsite sewage system regulation and education, and his role in the RDC.

Bill Dewey, Taylor Shellfish Farms Project Development and Public Affairs Division Manager, will describe the shellfish industry in Washington state, the impact of onsite septic systems on the shellfish industry, and his role in the RDC.

Reed Tacia, of Reed's Construction, will describe on-site sewage system operations and maintenance, and his role in the RDC.

Maryanne Guichard, DOH Environmental Health & Safety Program Manager, will present the department's rule development process, including the makeup of the committee, the resources assigned, the timeline, and the Board's involvement.

At this time, the onsite sewage systems rules process is in the fifth stage of the rule review process – "SBOH & DOH staff develops draft rule and analyses with sponsor" (see attached "State Board of Health Rules Process" flow chart).

Note: OAC members include:

Dean Bannister, Bannister Septic
Kevin Barry, Director, Environmental Health, Grant County Health District
Bill Dewey, Taylor Shellfish Company
Larry Fay, Director, Environmental Health, Jefferson County Health & Human Services
Dave Ghylin, Dave's Designs
James Hart, Kitsap City Sewer District #5
Teri King, Office of Marine Environmental and Resource Programs, WA Sea Grant Program
Brian Minnich, Building Industry Association of WA
Mike Morris, Keystone Engineering
Sharon Nelson, representing public consumers
Paula Rioux, Washington Public Utility District Association
David Swink, Director, Environmental Health, Spokane Regional Health District
Bruce Wishart, People for Puget Sound
Bruce Wulkan, Puget Sound Water Quality Action Team.